



The Parade

For a few short weeks of the year, a person can take a leisurely stroll through the Chippewa National Forest and celebrate the return of our migratory forest birds. It's a fleeting condition, best enjoyed before the leaves are fully on the trees, when you have a fighting chance of seeing just what birds are out there singing. Make the most of this season when it occurs, because generally by the time the leaves really pop, so has something else and only a fool would move slowly. Yes, once again we are dealing with those dratted bugs!

You know we have arrived at that time of year, when comments about the bug level dominate our conversations. My gardening friends are complaining that they must spray themselves down before attempting to do any digging or tending whatsoever. In the grocery store, an acquaintance asked me the whereabouts of the bug-eating bats. And at work, there was much excitement when the first dragonflies appeared on the scene.

I can relate. One of the all-time worst working days in my career occurred over 20 years ago, but I can picture it like it was yesterday. I had a project that spring involving flagging out some habitat improvement work that was planned to occur along a hunter walking trail. I had spent a pleasant day or two at this task, and then was off to something else for a few days, before I returned to finish it up. Sad for me that the day I came back to it coincided with the day the bugs popped, a fact that did not become known to me until I was well into the woods, and no bug dope in my cruiser's vest. I am not proud to relate that I was eventually driven crazy enough to actually go running through the woods.

My husband, the logger in the family, speaks of the value of chain saw exhaust in keeping the bugs at bay. He also tells of his grandfather, who used to walk through the house in the evening with a smudge pot to help lay down the bugs so that folks could sleep. The smudge pot was a can full of hot coals, upon which was heaped green grass. To be honest, I don't really care to imagine what that life must have been like.

I find myself measuring the progression of summer on the Chippewa in terms of the progression of the bugs. There is the first, heavy onslaught of mosquitoes, followed by subsequent hatches as conditions develop. Things may be starting to ease up a bit, when the deer flies arrive on the scene and finally the big horse flies make their presence known. It's rather like a parade... a parade of bugs, with a hard frost or two bringing up the end.

The common factor linking all these bugs on the Chippewa is water. The Chippewa National Forest is a very wet place, with over 400,000 acres of lakes and wetlands. The public lands of your National Forest provide a safe harbor for this important resource, and the web of life that is dependent upon it. In Minnesota, about half of the wetlands present prior to European settlement have been lost due to drainage and filling practices prevalent in the past century. Wetlands in Minnesota, as throughout most of the U.S., have come under tremendous pressure due to land use and development.

I did a little reading on a few of the Chippewa's more obvious bugs, and found it to be rather interesting. Did you know that there are 3500 named species of mosquitoes in the world, and their history on earth goes back over 100 million years? In Minnesota, there are at least 60 species of mosquitoes. About 28 species are known to bite humans. Most people know that it is only the female mosquito that bites. Both males and females feed on flower nectar or plant juices, but the females require a blood meal in order for their fertilized eggs to develop.

I found a website that tells you how to be sure to attract mosquitoes to you. One of the tips is not to change your socks, as mosquitoes apparently love smelly feet. Also, don't bathe, and do drink beer. Mosquitoes detect us by the heat we give off and the carbon dioxide we exhale, as well as our scent. Sweet smells, including those developed through the use of hair sprays and perfumes, attract mosquitoes. Sugar gives mosquitoes energy to fly.

Female mosquitoes lay their eggs directly on water or along its edge. The eggs hatch after they are flooded by water, or if it's dry, may lay dormant for years. Upon hatching, the s-shaped wigglers swim about. Adult mosquitoes emerge from the water in a week, and 2 days later the females take blood. Adults live 2 to 4 weeks, during which time they may bite 1 to 3 times. Depending on the species, there are 1 to 4 generations of mosquitoes per year. Mosquitoes winter over as eggs in the soil.

Mosquitoes are an integral part of the food web. The larvae filter tiny organic particles from the water. In turn, wigglers are eaten by fish and other aquatic organisms. Hundreds of fish species are known to consume mosquitoes. Mosquitoes are also eaten by dragonflies, other insects, spiders, salamanders, lizards, frogs, birds, and bats. One author suggested that the number of migratory birds nesting in the tundra would drop by 50% without mosquitos as a food source.

Deer flies are those annoying flies that really buzz around your head. About a half inch long, their movements are described as "slow", because you have a good chance of swatting them when they land on you. However, I have tested the ability of swarms of these insects to keep up with a moving vehicle, and have found that you really don't lose them until you are going 24 mph. No wonder my visiting sister and her spouse could not out-ride them on bikes.

Like mosquitoes, it is the female deer flies that feed on blood. They feed on white-tailed deer, and there are times in the summer when the deer seem fairly crazed by flies as they emerge from the woods along roadsides. Deerflies lay their eggs on wetland plants. The larvae hatch, and fall into the water where they overwinter. They emerge as adult flies in June and July. Deerflies are parasitized by wasps. They are also eaten by dragonflies and many birds, especially swallows and flycatchers.

Horse flies are about an inch long, and are attracted to large animals like horses, and people. Male horse flies feed on nectar and pollen; females need that blood meal. The females lay eggs on plants near ponds and lakes, and the larvae spend 2 winters in the water before they emerge as adult flies generally in July and August. I can tell when the horse flies have come even without seeing any flies, simply by the behavior of my horses. When the horse flies are thick, the horses spend the day in the barn where they experience some relief, and come out to graze at night when the flies retire. Their chests get riddled with bug bites, and if they venture forth at the wrong time, may be driven back to cover at a full-out run. Female horse flies often patrol lakeshores, a fact you will observe if you spend much time swimming.

The lakes, streams, and wetlands of the Chippewa are a lovely resource, with the diversity of life they support. No doubt that bugs are a fundamental part of the ecology of such a wet place. But I have to admit that in the summer, my favorite room in my house is the screen porch. I especially love being able to throw wide the doors from my living room to the porch, and listen to the birds and the breezes when doing my morning stretching routine... with the parade passing by safely on the other side of the screen!



by Kelly Barrett, Wildlife Biologist
Chippewa National Forest